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(54) **Packaging container made from laminated materials**

Verpackung aus Schichtstoffmaterial
Emballage en matériau stratifié

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Description

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION:

[0001] The invention concerns a packaging container according to the opening part of claims 1 and 2.

DESCRIPTION OF THE RELATED ART:

[0002] Conventionally, packaging containers used for holding liquid foods such as soft drinks and milk have been manufactured in a manner in which a web-like packaging material is formed into a brick-like shape, for example, as described in patent abstracts of Japan Vol. 14, Januar 19, 1990.

[0003] Fig. 1 is a sectional view of a conventional packaging material. As shown in this drawing, a packaging material 11 is composed of a paper substrate 13, a layer 14 which is the innermost layer when the packaging material 11 is shaped into a package container (hereinafter simply referred to as the "innermost layer"), a layer 15 which is the outermost layer when the packaging material 11 is shaped into a package container (hereinafter simply referred to as the "outermost layer"), a gas barrier layer 16 formed between the paper substrate 13 and the innermost layer 14, and an adhesive layer 27. The paper substrate 13 is made of paperboard or a similar material, and the gas barrier layer 16 is bonded thereto by the adhesive layer 27.

[0004] The opposite side edges of the packaging material 11 are overlapped with each other and then joined together by heat fusion in the longitudinal direction to obtain a tubular packaging material. The tubular packaging material is then continuously transferred downward while a liquid food is supplied into it from its top. Then, the tubular material is pressed from both sides thereof and is sealed laterally at predetermined intervals so as to obtain pillow shaped containers, which are then formed into a brick-like shape.

[0005] A strip tape 25 is adhered to the sealed portion longitudinally extending along the inner surface of each packaging container (hereinafter referred to as "longitudinal sealing portion") to prevent air from entering the packaging container from a side edge of the packaging material 11 and to prevent liquid food from permeating the paper substrate 13.

[0006] Packaging containers, the packaging material 11 of which has the innermost layer 14 made of a polyolefin resin, do not have sufficient ability to maintain the flavors of foods. This is because liquid foods contained in the containers contact the polyolefin resin, which adsorbs flavoring ingredients of the liquid foods over time.

[0007] In order to increase the flavor-retaining ability

of each container, the polyolefin resin layer may be coated with a non-olefin flavor retaining resin which serves as the innermost layer 14. In this case, the strip tape 25 is made of a non-polyolefin resin which can be easily joined to the above-described flavoring-retaining resin by heat fusion. The strip tape 25 is adhered to the longitudinal sealing portion using heat and pressure.

[0008] When the innermost layer 14 of the web-like package material is made of a flavor-retaining resin, the resin is joined to a polyolefin resin forming the outermost layer 15 when the overlapped side edges of the packaging material 11 are fused and joined in the longitudinal direction. However, since the flavor-retaining resin and the polyolefin resin are difficult to join with each other, only a poor seal can be obtained.

This problem can be solved by joining the flavor-retaining resin and the polyolefin resin by fusion after activating the sealing portion of the surface of the flavor-retaining resin by a corona discharge treatment, an ozone treatment, or a flame treatment, or by joining the flavor-retaining resin and the polyolefin resin by fusion at a high temperature.

[0009] However, a sufficient seal cannot be obtained even when the flavor-retaining resin is subjected to corona discharge treatment, ozone treatment or flame treatment.

[0010] When the flavor-retaining resin and the polyolefin resin are fused at a high temperature to join them together, the manufacturing costs increase due to the necessity of an apparatus for high-temperature fusion.

[0011] It is possible to join the flavor-retaining resin forming the innermost layer 14 and the polyolefin resin forming the outermost layer 15 with an adhesive made of an ethylene - vinyl acetate copolymer (EVA), polyethylene chloride, or the like. In this case, however, steps for applying the adhesive to the packaging material 11 and drying it are additionally required, increasing the complexity and costs in the production process and making the work troublesome.

SUMMARY OF THE INVENTION

[0012] An object of the present invention is to solve the above-described problems of conventional packaging containers and to provide a packaging container which has an enhanced sealing performance and which reduces production costs.

[0013] The invention is characterized in claims 1 and 4 and preferred embodiments are claimed in sub-claims.

[0014] A packaging container according to one aspect of the present invention includes a packaging material, an outside strip, and a strip tape. The opposite side edges of the package material are overlapped with each other so that the outermost layer and the innermost layer of the package material face each other. The outside strip is interposed between the outermost layer and the innermost layer along a longitudinal sealing portion,

and is joined by heat fusion with the outermost layer and the innermost layer.

[0015] The outside strip has an outside layer and an inside layer. The strip tape is placed on the inner surface of the packaging container along the longitudinal sealing portion, and is joined thereto by heat fusion.

[0016] The innermost layer of the packaging material and the outside layer of the outside strip are made of resins which have compatibility with each other while the outermost layer of the packaging material and the inside layer of the outside strip are made of resins which have compatibility with each other.

[0017] With this structure, resins which are compatible with each other are melted and joined to each other to form a longitudinal sealing portion, thereby providing an enhanced sealing performance.

[0018] A packaging container according to another aspect of the present invention includes a packaging material, a hot melt layer, and a strip tape. The opposite side edges of the packaging material are overlapped with each other so that the outermost layer and the innermost layer of the packaging material face each other. The hot melt layer is provided between the outermost layer and the innermost layer along a longitudinal sealing portion. The strip tape is placed on the inner surface of the packaging container along the sealing portion, and is joined thereto by heat fusion.

[0019] With this structure, an enhanced sealing performance can be obtained due to the existence of the hot melt layer between the innermost layer and the outermost layer.

[0020] In a packaging container according to still another aspect of the present invention, the innermost layer of the packaging material is preferably a non-olefin flavor-retaining resin.

[0021] In this case, since liquid food in the packaging container contacts the flavor-retaining resin, the flavor ingredients of the liquid food are not absorbed thereby, resulting in an enhanced flavor retainability.

[0022] Preferably, a heat absorbing layer is formed on the outside of the paper substrate. In this case, the outer surface of the paper substrate is covered by the heat absorbing layer along the longitudinal sealing portion. Accordingly, when infrared rays are irradiated to the longitudinal sealing portion, the heat absorbing layer is locally heated to a high temperature due to the radiant heat, so that the intermediate layer and the outermost layer can be easily fused and joined to each other without causing color changes in the remaining printed surface.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] The structures and features of packaging containers according to the present invention will become clear by referring to the accompanying drawings, in which:

Fig. 1 is a sectional view of a conventional packaging material;

Fig. 2 is a sectional view of a packaging material according to a first embodiment of the present invention;

Fig. 3 is a sectional view of a part of a packaging material according to a special embodiment of the present invention; and

Fig. 4 is a sectional view of a packaging material according to a second embodiment of the present invention.

DESCRIPTION OF PREFERRED EMBODIMENTS

[0024] Embodiments of the present invention will now be described in detail with reference to the accompanying drawings.

[0025] Fig. 2 is a sectional view of a packaging material according to a first embodiment of the present invention.

[0026] As shown in Fig. 2, a packaging material 11 is composed of a paper substrate 13, an innermost layer 14, an outermost layer 15, a gas barrier layer 16 formed between the paper substrate 13 and the innermost layer 14, and an adhesive layer 27. The paper substrate 13 is made of paperboard or the like, and the gas barrier layer 16 is adhered to the paper substrate 13 by the adhesive layer 27. An ethylene - acrylic acid copolymer or the like is used to form the adhesive layer 27. An aluminum foil is used for the gas barrier layer 16.

[0027] The innermost layer 14 is formed of a flavor-retaining resin which is coated on the surface of the gas barrier layer 16 which will be located inside the gas barrier layer 16 when the packaging material 11 is formed in a packaging container. The outermost layer 15 is formed of a polyolefin resin which is coated on the surface of the paper substrate 13 which will be located outside the paper substrate 13 when the packaging material 11 is formed in a packaging container. An adhesive layer may be formed between the innermost layer 14 and the gas barrier layer 16, if necessary.

[0028] Examples of the flavor-retaining resin include non-olefin resins such as polyester resins, polyamide resins, polyvinylidene chloride resins, ethylene - vinyl alcohol copolymers, polyvinyl chloride resins, epoxy resins, polyurethane resins, polyacrylate resins, polyacrylonitrile resins, and polycarbonate resins. A molten flavor-retaining resin is extruded as a film from an unillustrated extruder, and is then superposed on the inner surface of the gas barrier layer 16. A small amount of an additive such as nitrocellulose may be optionally added in the molten flavor-retaining resin. In the present embodiment, a modified polyester is used for the flavor-retaining resin.

[0029] Since the liquid food comes into contact with the flavor-retaining resin, the flavor ingredients of the liquid food are not absorbed thereby. As a result, an enhanced flavor retainability can be obtained.

[0030] Examples of the polyolefin resin include polyethylene, polypropylene, low-density polyethylene, and linear low-density polyethylene. In the present embodiment, polyethylene is used for the polyolefin resin.

[0031] A packaging container for carrying liquid food can be obtained by forming the web-like packaging material 11 into, for example, a brick-like shape. In detail, the opposite side edges of the packaging material 11 are overlapped with each other and are joined by heat fusion in the longitudinal direction to obtain a tubular packaging material. The obtained tubular material is continuously transferred downward while a liquid food is supplied into it from the top. Then, the tubular material is pressed from both sides thereof and is sealed laterally at predetermined intervals so as to obtain pillow shaped containers, which are then formed into a brick-like shape.

[0032] Since the innermost layer 14 is made of a flavor-retaining resin, it is difficult to join the innermost layer 14 to the outermost layer 15 by heat fusion, in order to join the opposite side edges of the packaging material 11 in the longitudinal direction. Also, it becomes difficult to join opposite surfaces of the innermost layer 14 by heat fusion.

[0033] To overcome these problems, the packaging container according to the present embodiment employs an outside strip 20 which is disposed between the innermost layer 14 and the outermost layer 15 along the longitudinal sealing portion to prevent the outermost layer 15 from coming into direct contact with the innermost layer 14. Therefore, the opposite side edges of the packaging material 11 are joined to each other via the outside strip 20.

[0034] To this end, the outside strip 20 is adhered to the packaging material 11 along the longitudinal sealing portion before the packaging material is sterilized using hydrogen peroxide. In this case, infrared rays are irradiated or hot air is jetted to the longitudinal sealing portion of the outermost layer 15.

[0035] The outside strip 20 is composed of an inside resin layer 21 which is contacted with the outermost layer 15 and is made of a resin compatible with the outermost layer 15, an outside resin layer 23 which is contacted with the innermost layer 14 and is made of a resin compatible with the innermost layer 14, and an adhesive layer 22 for bonding the inside resin layer 21 and the outside resin layer 23.

[0036] The inside resin layer 21 is made of a polyolefin resin. Examples of the polyolefin resin include polyethylene, polypropylene, low-density polyethylene, and linear low-density polyethylene. In the present embodiment, low-density polyethylene is used.

[0037] The outside resin layer 23 is made of a non-olefin resin. Examples of the non-olefin resin include polyester resins, polyamide resins, polyvinylidene chloride resins, ethylene - vinyl alcohol copolymers, polyvinyl chloride resins, epoxy resins, polyurethane resins, polyacrylate resins, polyacrylonitrile resins, and polycar-

bonate resins. In the present embodiment, a modified polyester is used.

[0038] As described above, the sealing performance can be improved by interposing the outside strip 20 between the innermost layer 14 and the outermost layer 15 along the longitudinal sealing portion.

[0039] Since the packaging material 11 has a web-like shape, the paper substrate 13 is exposed to the liquid food in the packaging container at a side edge. Therefore, a strip tape 25 is adhered to the inner surface of the packaging container along the longitudinal sealing portion to prevent the paper substrate 13 from being exposed to the liquid food.

[0040] The strip tape 25 is composed of a layer of a modified polyester, an adhesive layer, a layer of a stretched polyester, an adhesive layer, and a layer of a modified polyester which are superposed in this order from the side facing the innermost layer 14. The layer of a stretched polyester is formed to reinforce the strip tape 25.

[0041] Next, the results of tests which were performed on packaging containers manufactured in the above-described manner will be described.

[0042] In a pressure test, the packaging containers endured a pressure of 50 kgf. In a test for detecting pinholes, no packaging container having a pinhole existed in 1,000 packaging containers examined. Subsequently, a drop test was performed by dropping 50 packaging containers from a height of 270 cm. No packaging container caused leakage of liquid food.

[0043] Also, a vibration test was performed by applying a vibration of 12 Hz for 30 minutes to each packaging container while applying a load of 0.5 g thereto. The generation of a pinhole or leakage of liquid food was not found in 891 tested packaging containers. The top portion of one packaging container was deformed.

[0044] Next, a special embodiment of the present invention will be described.

[0045] Fig. 3 is a sectional view of a packaging material according to the special embodiment of the present invention.

[0046] As shown in Fig. 3, a packaging material 11 is composed of a paper substrate 13 as a base layer, an innermost layer 14, an outermost layer 15, a gas barrier layer 16 formed between the paper substrate 13 and the innermost layer 14, and an adhesive layer 27 as an intermediate layer. The paper substrate 13 is made of paperboard or the like, and the gas barrier layer 16 is adhered to the paper substrate 13 by the adhesive layer 27. A resin compatible with the outermost layer 15 is used to form the adhesive layer 27. An aluminum foil is used for the gas barrier layer 16.

[0047] The innermost layer 14 is formed of a flavor-retaining resin which is coated on the inner surface of the gas barrier layer 16. The outermost layer 15 is formed of a polyolefin resin which is coated on the outer surface of the paper substrate 13.

[0048] Examples of the flavor-retaining resin include

non-olefin resins such as polyester resins, polyamide resins, polyvinylidene chloride resins, ethylene - vinyl alcohol copolymers, polyvinyl chloride resins, epoxy resins, polyurethane resins, polyacrylate resins, polyacrylonitrile resins, and polycarbonate resins. A molten flavor-retaining resin is extruded as a film from an unilustrated extruder, and is then superposed on the inner surface of the gas barrier layer 16. A small amount of an additive such as nitrocellulose may be optionally added in the molten flavor-retaining resin. In the present embodiment, polyester is used as the flavor-retaining resin.

[0049] Since the liquid food comes into contact with the flavor-retaining resin, the flavor ingredients of the liquid food are not absorbed thereby. As a result, an enhanced flavor retainability can be obtained.

[0050] Examples of the polyolefin resin include polyethylene, polypropylene, low-density polyethylene, and linear low-density polyethylene. In the present embodiment, polyethylene is used for the polyolefin resin. Therefore, polyethylene is also used for the adhesive layer 27.

[0051] A packaging container for carrying liquid food can be obtained by forming the web-like packaging material 11 into, for example, a brick-like shape. In detail, the opposite side edges of the packaging material 11 are overlapped with each other and are joined by heat fusion in the longitudinal direction to obtain a tubular packaging material. The obtained tubular material is continuously transferred downward while a liquid food is supplied into it from the top. Then, the tubular material is pressed from both sides thereof and is sealed laterally at predetermined intervals to obtain pillow shaped containers, which are then formed into a brick-like shape.

[0052] Before the packaging material 11 is sterilized with hydrogen peroxide, black ink 31 serving as a heat absorbing layer is applied to the outer surface of the paper substrate 13 along the longitudinal sealing portion. Accordingly, when infrared rays are irradiated to the longitudinal sealing portion, the black ink 31 is locally heated to a high temperature due to the radiant heat, so that the hot melt layers 30 or strip 20 and the outermost layer 15 can be easily fused and joined to each other without causing color changes in the remaining printed surface.

[0053] Subsequently, both side edges of the packaging material 11 are fused and joined to each other in the longitudinal direction.

[0054] Next, a second embodiment of the present invention will be described.

[0055] Fig. 4 is a sectional view of a packaging material according to the second embodiment of the present invention.

[0056] As shown in Fig. 4, a packaging material 11 is composed of a paper substrate 13, an innermost layer 14, an outermost layer 15, a gas barrier layer 16 formed between the paper substrate 13 and the innermost layer

14, and an adhesive layer 27. The paper substrate 13 is made of paperboard or the like, and the gas barrier layer 16 is adhered to the paper substrate 13 by the adhesive layer 27. An ethylene - acrylic acid copolymer or the like is used for forming the adhesive layer 27. An aluminum foil is used for the gas barrier layer 16.

[0057] The innermost layer 14 is formed of a flavor-retaining resin which is coated on the inner surface of the gas barrier layer 16. The outermost layer 15 is formed of a polyolefin resin which is coated on the outer surface of the paper substrate 13.

[0058] In the present embodiment, a hot melt layer 30 is disposed between the innermost layer 14 and the outermost layer 15 along the longitudinal sealing portion. Therefore, the both side edges of the packaging material 11 are joined to each other via the hot melt layer 30.

[0059] The present invention is not limited to the above-described embodiments, and various modifications and variations can be made based on the present invention as defined in the claims. Therefore, these modifications and variations should not be construed to be excluded from the scope of the present invention.

Claims

1. A packaging container comprising:

a packaging material (11) having opposite side edges which overlap each other such that an outermost layer (15) and an innermost layer (14) of said packaging material (11) face each other, wherein
said outermost layer (15) is made of a polyolefin resin, and
said innermost layer (14) is made of a non-olefin flavor-retaining resin,
a strip tape (25) joined by heat fusion to the inner surface of the packaging container along a longitudinal sealing portion,
characterized in that,
an additional outside strip (20) is interposed between said outermost layer (15) and said innermost layer (14) along said longitudinal sealing portion,
that said outside strip (20) has an outside layer (23) and an inside layer (21), wherein said outside layer (23) is made of a non-olefin resin and said inside layer (21) is made of a polyolefin resin, and
that said outside layer (23) is joined with said innermost layer (14) and said inside layer (21) is joined with said outermost layer (15) by heat fusion to form the packaging container.

2. A packaging container as claimed in claim 1, characterized in that,

said outside layer (23) is made of a non-olefin

resin including polyester resins, polyamide resins, polyvinylidene chloride resins, ethylene-vinyl alcohol copolymers, polyvinyl chloride resins, epoxy resins, polyurethane resins, polyacrylate resins, polyacrylonitrile resins and polycarbonate resins.

3. A packaging container as claimed in claim 1, characterized in that,

said inside layer (21) is made of a polyolefin resin including polyethylene, polypropylene, low-density polyethylene and linear low-density polyethylene.

4. A packaging container comprising:

a packaging material (11) having opposite side edges which overlap each other such that an outermost layer (15) and an innermost layer (14) of said packaging material (11) face each other, wherein

said outermost layer (15) is made of a polyolefin resin, and

said innermost layer (14) is made of a non-olefin flavor-retaining resin, and

a strip cape (25) joined by heat fusion to the inner surface of the packaging container along a longitudinal sealing portion,

characterized in that,

an additional outside strip (30) is interposed between said outermost layer (15) and said innermost layer (14) along said longitudinal sealing portion and joined with them by heat fusion to form the packaging container, and that said outside strip (30) is formed by a hot melt material which joins said opposite side edges of said packaging container.

5. A packaging container according to one of the preceding claims, characterized in that,

said innermost layer (14) is made of a flavor-retaining resin including non-olefin resins such as polyester resins, polyamide resins, polyvinylidene chloride resins, ethylene-vinyl alcohol copolymers, polyvinyl chloride resins, epoxy resins, polyurethane resins, polyacrylate resins, polyacrylonitrile resins and polycarbonate resins.

6. A packaging container according to one of the preceding claims, characterized in that,

said outermost layer (15) is made of a polyolefin resin including polyethylene, polypropylene,

low-density polyethylene and linear low-density polyethylene.

7. A packaging container as claimed in one of the preceding claims, characterized in that,

a heat absorbing layer (31) is applied to the outer surface of a substrate (13) being situated between said outermost layer (15) and said innermost layer (14) along said longitudinal sealing portion.

8. A packaging container as claimed in claim 7, characterized in that,

said heat absorbing layer (31) comprises black ink.

20 Patentansprüche

1. Verpackung bestehend aus:

einem Verpackungsmaterial (11) mit gegenüberliegenden Seitenkanten, die sich in Überlappung befinden, so daß eine äußerste Schicht (15) und eine innerste Schicht (14) des Verpackungsmaterials (11) einander zugewandt sind, wobei

die äußerste Schicht (15) aus einem Polyolefin-Harz besteht, und

die innerste Schicht (14) aus einem geschmackerhaltenden Nicht-Olefin-Harz besteht, und

einem Streifenband (25), das durch Warmverschmelzen an der inneren Oberfläche der Verpackung entlang eines längsverlaufenden Nahtbereichs angebracht ist,

dadurch gekennzeichnet,

daß ein zusätzlicher Außenstreifen (20) zwischen der äußersten Schicht (15) und der innersten Schicht (14) entlang des längsverlaufenden Nahtbereichs angeordnet wird,

daß der Außenstreifen (20) eine äußere Schicht (23) und eine innere Schicht (21) aufweist, wobei die äußere Schicht (23) aus einem Nicht-Olefin-Harz besteht und die innere Schicht (21) aus einem Polyolefin-Harz besteht, und

daß die äußere Schicht (23) mit der innersten Schicht (14) und die innere Schicht (21) mit der äußersten Schicht (15) durch Warmverschmelzen verbunden wird, um die Verpackung herzustellen.

2. Verpackung nach Anspruch 1, **dadurch gekennzeichnet,**

daß die äußere Schicht (23) aus einem Nicht-Olefin-Harz besteht, z.B. aus Polyesterharz, Polyamidharz, Polyvinylidenchloridharz, Ethylen - Vinylalkohol-Kopolimer, Polyvinylchloridharz, Epoxidharz, Polyurethanharz, Polyacrylatharz, Polyacrylnitrilharz und Polycarbonatharz.

3. Verpackung nach Anspruch 1,
dadurch gekennzeichnet,

daß die innere Schicht (21) aus einem Polyolefin-Harz besteht, wie z.B. Polyethylen, Polypropylen, Polyethylen mit niedriger Dichte und linearem Polyethylen mit niedriger Dichte.

4. Verpackung bestehend aus:

einem Verpackungsmaterial (11) mit gegenüberliegenden Seitenkanten, die sich in Überlappung befinden, so daß eine äußerste Schicht (15) und eine innerste Schicht (14) des Verpackungsmaterials (11) einander zugewandt sind, wobei

die äußerste Schicht (15) aus einem Polyolefin-Harz besteht, und
die innerste Schicht (14) aus einem geschmackerhaltenden Nicht-Olefin-Harz besteht, und

einem Streifenband (25), das durch Warmverschmelzen mit der inneren Oberfläche der Verpackung entlang eines längsverlaufenden Nahtbereichs verbunden ist,

dadurch gekennzeichnet,

daß ein zusätzlicher Außenstreifen (30) zwischen der äußersten Schicht (15) und der innersten Schicht (14) entlang des längsverlaufenden Nahtbereichs angeordnet und mit diesen durch Warmverschmelzen verbunden wird, um die Verpackung herzustellen, und
daß der Außenstreifen (30) aus einem Hotmelt-Material besteht, das die gegenüberliegenden Seitenkanten der Verpackung verbindet.

5. Verpackung nach einem der vorhergehenden Ansprüche
dadurch gekennzeichnet,

daß die innerste Schicht (14) aus einem geschmackerhaltenden Harz besteht, das Nicht-Olefin-Harz aufweist, z.B. Polyesterharz, Polyamidharz, Polyvinylidenchloridharz, Ethylen - Vinylalkohol-Kopolimer, Polyvinylchloridharz, Epoxidharz, Polyurethanharz, Polyacrylatharz, Polyacrylnitrilharz und Polycarbonatharz.

6. Verpackung nach einem der vorhergehenden

Ansprüche

dadurch gekennzeichnet,

daß die äußerste Schicht (15) aus einem Polyolefin-Harz besteht wie z.B. Polyethylen, Polypropylen, Polyethylen mit niedriger Dichte und linearem Polyethylen mit niedriger Dichte.

7. Verpackung nach einem der vorhergehenden Ansprüche

dadurch gekennzeichnet,

daß eine wärmeabsorbierende Schicht (31) auf die äußere Oberfläche eines Substrats (13) aufgetragen wird, das sich zwischen der äußersten Schicht (15) und der innersten Schicht (14) befindet, entlang des längsverlaufenden Nahtbereichs.

8. Verpackung nach Anspruch 7

dadurch gekennzeichnet,

daß die wärmeabsorbierende Schicht (31) aus schwarzer Tinte besteht.

Revendications

1. Emballage en matériau stratifié comprenant :

un matériau d'emballage (11) dont les bords latéraux opposés se chevauchent de sorte qu'une couche externe (15) et une couche interne (14) dudit matériau d'emballage (11) se font face, tandis que

ladite couche externe (15) est constituée d'une résine polyoléfinique et
que ladite couche interne (14) est constituée d'une résine de conservation de saveur non oléfinique et

un ruban adhésif (25) lié par fusion thermique à la surface interne de l'emballage en matériau stratifié le long d'une partie de scellement longitudinale,

caractérisé en ce que

une bande externe supplémentaire (20) est intercalée entre ladite couche externe (15) et ladite couche interne (14) le long de ladite partie de scellement longitudinale,

en ce que ladite bande externe (20) présente une couche externe (23) et une couche interne (21), tandis que ladite couche externe (23) est composée d'une résine non oléfinique et que ladite couche interne (21) est constituée d'une résine polyoléfinique, et

en ce que ladite couche externe (23) est liée à ladite couche interne (14) et ladite couche interne (21) est liée à ladite couche externe (15) par fusion thermique pour former l'emballage.

lage en matériau stratifié.

2. Emballage en matériau stratifié selon la revendication 1,

caractérisé en ce que

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ladite couche externe (23) est constituée d'une résine non oléfinique choisie parmi les résines de polyester, les résines de polyamide, les résines de chlorure de polyvinylidène, les copolymères éthylène - alcool vinyliques, les résines de chlorure de polyvinyle, les résines époxy, les résines de polyuréthane, les résines de polyacrylate, les résines de polyacrylonitrile et les résines de polycarbonate.

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3. Emballage en matériau stratifié selon la revendication 1,

caractérisé en ce que

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ladite couche interne (21) est composée d'une résine polyoléfinique choisie parmi le polyéthylène, le polypropylène, le polyéthylène de faible densité et le polyéthylène linéaire de faible densité.

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4. Emballage en matériau stratifié comprenant :

un matériau d'emballage (11) dont les bords latéraux opposés se chevauchent de sorte qu'une couche externe (15) et une couche interne (14) dudit matériau d'emballage (11) se font face, tandis que

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ladite couche externe (15) est constituée d'une résine polyoléfinique et que ladite couche interne (14) est constituée d'une résine de conservation de saveur non oléfinique et

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un ruban adhésif (25) lié par fusion thermique à la surface interne de l'emballage en matériau stratifié le long d'une partie de scellement longitudinale, caractérisé en ce que

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une bande externe supplémentaire (30) est intercalée entre ladite couche externe (15) et ladite couche interne (14) le long de ladite partie de scellement longitudinale et liée à ces dernières par fusion thermique pour former l'emballage en matériau stratifié, et que ladite bande externe (30) est formée d'un matériau thermofusible liant lesdits bords latéraux opposés dudit emballage en matériau stratifié.

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5. Emballage en matériau stratifié selon l'une des revendications précédentes,

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caractérisé en ce que

ladite couche interne (14) est constituée d'une résine de conservation de saveur comprenant des résines non oléfiniques choisies parmi les résines de polyester, les résines de polyamide, les résines de chlorure de polyvinylidène, les copolymères éthylène - alcool vinyliques, les résines de chlorure de polyvinyle, les résines époxy, les résines de polyuréthane, les résines de polyacrylate, les résines de polyacrylonitrile et les résines de polycarbonate.

6. Emballage en matériau stratifié selon l'une des revendications précédentes,

caractérisé en ce que

ladite couche externe (15) est composée d'une résine polyoléfinique choisie parmi le polyéthylène, le polypropylène, le polyéthylène de faible densité et le polyéthylène linéaire de faible densité.

7. Emballage en matériau stratifié selon l'une des revendications précédentes,

caractérisé en ce que

une couche absorbante de chaleur (31) recouvre la surface externe d'un substrat (13) situé entre ladite couche externe (15) et ladite couche interne (14) le long de ladite partie de scellement longitudinale.

8. Emballage en matériau stratifié selon la revendication 7,

caractérisé en ce que

ladite couche absorbante de chaleur (31) contient de l'encre noire.

FIG. 1
(PRIOR ART)

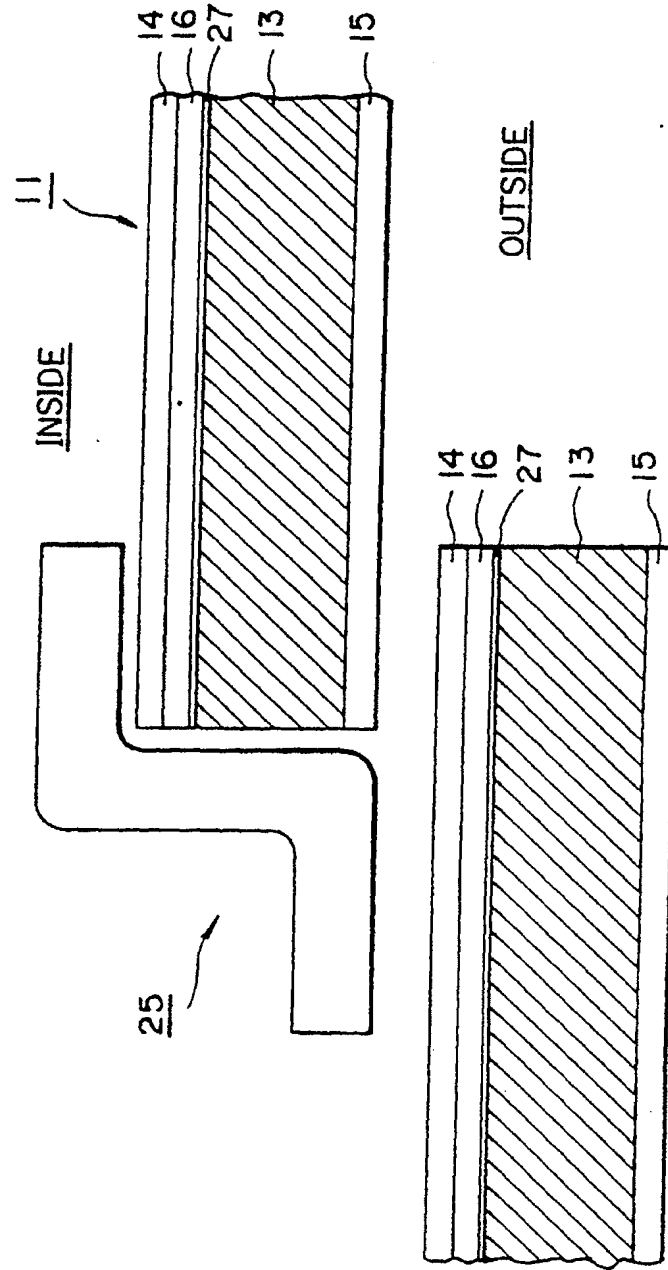


FIG. 2

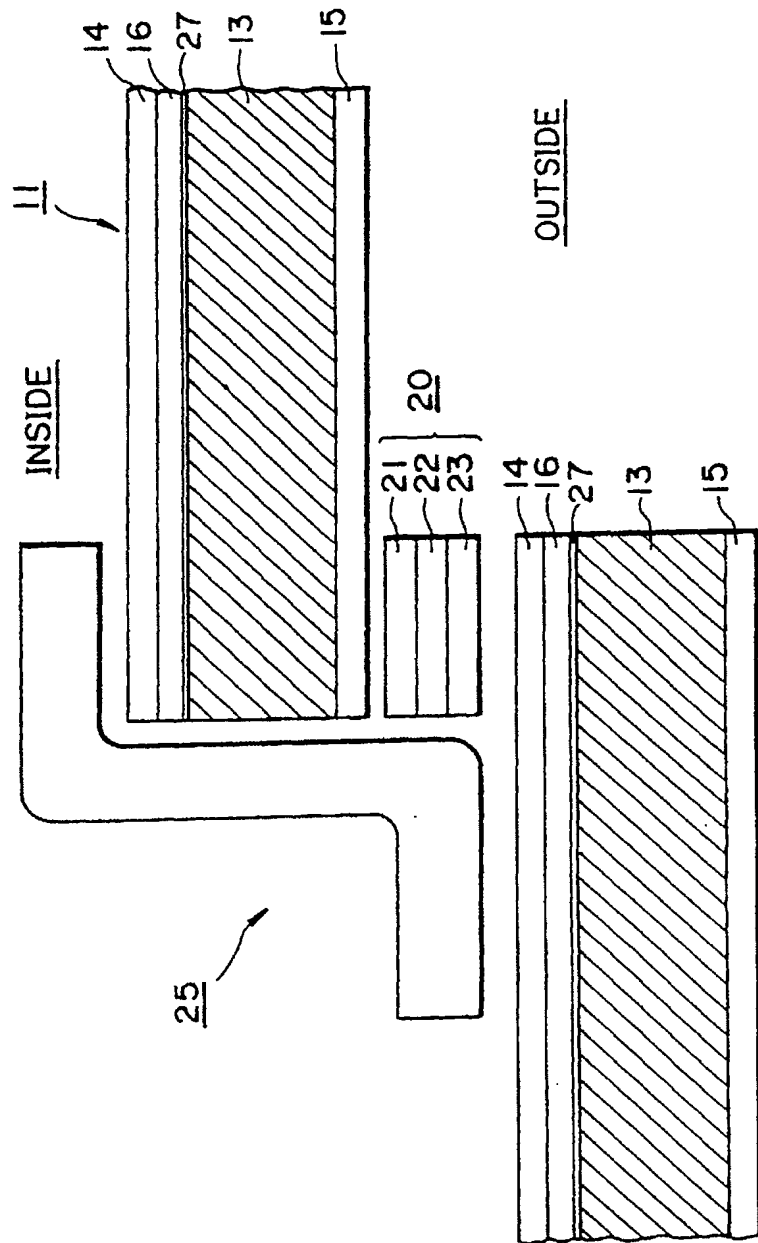


FIG. 3

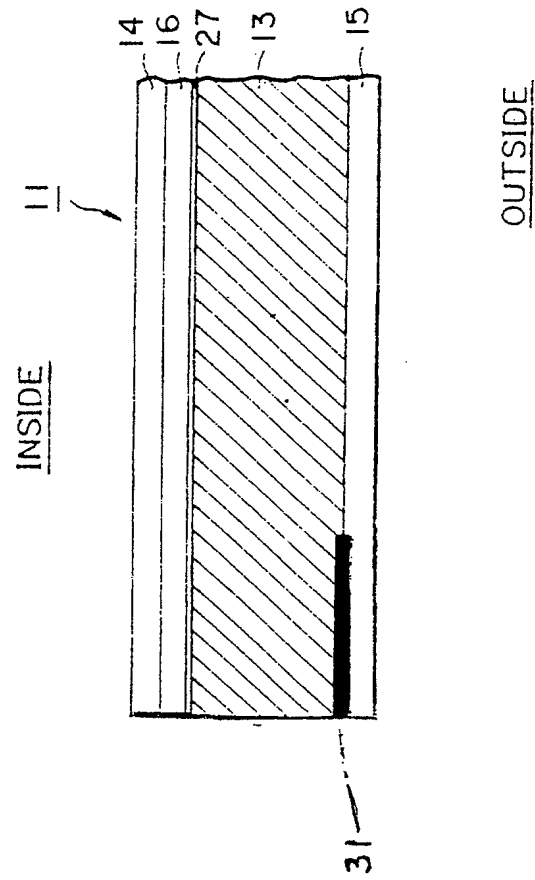


FIG. 4

